

- c) identifying at least one of said progeny plants that contains a delta-15 fatty acid desaturase gene having at least one mutation, said at least one mutation in a region encoding a His-Xaa-Xaa-Xaa-His amino acid motif; and
- d) producing said plant line from said at least one progeny plant by self- or cross-pollination, said plant line having said delta-15 gene mutation [for at least three additional generations].

REMARKS

The amendments presented above to the specification and claims correct typographical errors and inadvertent omissions in the above-identified application.

The amendments at page 1 indicate which of the parent applications have been abandoned.

The amendment at page 13 adds a phrase that was inadvertently omitted from the sentence.

The amendment at page 14, line 9, directs the reader to the table that shows the conserved HECGH motif.

At page 15, the amendment at line 8 directs the reader to a motif in Table 6 that was inadvertently omitted from the sentence. The amendment at line 11 corrects an inadvertent error in the cited references. The amendment at line 15 directs the reader to the proper table showing the indicated motif. The amendment at line 17 directs the reader to the correct location

of the indicated mutant sequence. Table 4 does not contain the indicated mutant sequence.

The amendment at page 17 adds Table 6, which was inadvertently omitted. Table 6 is a further illustration of a suitable region for mutation. The same publications that disclose the sequences of Tables 1-5 also disclose the sequences of Table 6, i.e., WO 94/115116, Okuley et al., Arondel et al., Yadav et al. and Hitz et al. (Specification at page 13, line 23 to page 15, line 11). Thus, the sequences of Table 6 were inherently disclosed and suggested in the specification as filed.

The amendment at page 18, line 8, includes Table 6 in the indicated sentence. The amendment at line 32 corrects a grammatical error.

The amendment at page 27, line 24, spells out the indicated acronyms and also includes the acronym 3SR, which is found in claims 63 and 65.

The amendments at page 54 correct typographical errors at line 18 and line 28.

The amendment at page 58, line 1, corrects a grammatical error.

The amendment at page 59, line 5, corrects a typographical error with reference to the samples tested in Table XIX.

The amendments at page 60, lines 24 and 25, insert references to the indicated SEQ ID NOS.

Claims 1 and 27 have been amended to indicate that the claimed nucleic acid fragment is effective for altering the fatty

acid composition of the indicated seeds. Support for this claim amendment is found in, for example, Examples 10 and 12.

Claims 55, 57, 62 and 64 have been amended to indicate that one, or more than one, progeny plant may be obtained from the mutagenesis step indicated in the specified claims. The last step of these claims has also been amended to indicate the characteristics of the plant line produced.

Claims 55, 57, 62 and 64 have also been amended to specify that cross-pollination may be used to produce a plant line. Support for this amendment is found, for example, in Example 9 at pages 49-51, which discloses a cross of line A129 to Legend. The same claims have also been amended to delete a phrase concerning the number of generations to produce a plant line. As indicated at pages 51-52 of the specification, dihaploid populations may be used to generate plant lines and such plant lines may be produced in less than 3 generations.

Claim 62 has been amended to depend from claim 59, which provides antecedent basis for the first and second delta-12 gene mutations in the plant line of claim 62.

Claims 55, 57 and 62 have also been amended to correct the alphabetical listing of the steps of the method.

No new matter is added by these amendments.

Please apply any charges or credits to Deposit Account

No. 06-1050.

Respectfully submitted,

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